

REMARKS

By this Amendment claims 10 and 13 have been amended to better define the invention. Entry is requested.

In the outstanding Office Action the examiner has rejected claims 10-14 under 35 U.S.C. 103(a) as being unpatentable over Pederson.

This rejection cannot be applied to the amended claims.

Pederson discloses an LED warning signal light which includes a plurality of light sources constructed and arranged with a reflector.

As recognized by the examiner, the optical signaling device of Pederson differs from the present invention in that:

- a) the optical signaling elements are not laser generators/emitters;
and
- b) the cone-shaped pattern of light does not envelope the vehicle on which it is mounted.

The examiner alleges that these differences are "details". The examiner's opinion is respectfully but firmly traversed for the following reasons.

Concerning difference a), the choice of the laser light instead of a conventional light became is finalized to make the car clearly visible under conditions of poor visibility, particularly in foggy conditions.

In fact, conventional lights generate a light ray which, because of its incoherent nature, is greatly absorbed by water droplets which form rain

or fog. As a result, in the event of particularly dense fog, the light ray is visible no more than a few metres from the source which emits it.

By contrast, laser generators emit coherent rays which are refracted by the water droplets which form the fog. Thanks to this function, the laser rays are clearly visible from a long distance in foggy conditions, and their visibility increase with an increase in the density of the fog (since the refraction of the laser ray increases).

Therefore, the applicant cannot share the examiner's opinion that there is "equivalence of laser diode and light emitting diode" in the context.

It is pointed out that nowhere in Pederson is it disclosed or suggested to use a laser generator instead of a conventional light source in order to increase visibility under foggy condition.

As to difference b), the applicant cannot frankly understand the examiner's reasoning.

In fact, although it is recognized that the passages of the Pederson's patent indicated by the examiner suggest "the desirability to modify the pattern of light" (the so-called "could" option) it is pointed out that this prior art does not suggest modifying the signaling device (the so-called "would" option) in order to obtain the desired pattern of light, as well as the cone-shaped configuration that envelopes the vehicle.

As a matter of fact, Pederson, see column 45, lines 38 to 41, teaches that "[a]s depicted in FIGS. 61, 62, 65, and 66, the LED alley

lights 800, 808 provide illumination perpendicularly outward from a vehicle illuminating areas adjacent to the drivers side and passengers side of the vehicle 706" [emphasis added], i.e., substantially parallel to the roadway.

By contrast, in the signaling device according to the present invention each of the seats in which are housed the laser generators and the respective emission holes are arranged along a longitudinal axis directed towards the plane of travel of the vehicle, in such a manner that the laser ray emitted therefrom draws on the roadway.

Moreover, the drive means revolve the cylindrical body in which the laser generators are housed about the vertical rotation axis at a sufficient rotational speed so that the coherent laser rays emitted from the emission holes along the respective longitudinal axis form the image of a cone of light having a base laying on the roadway and an axis substantially coincident with the vertical rotation axis. The cone of light thus formed envelopes the body of the vehicle and move at the same speed thereof.

Thanks to this combination of features, the cone of laser coherent rays makes the car clearly visible from a long distance in conditions of poor visibility.

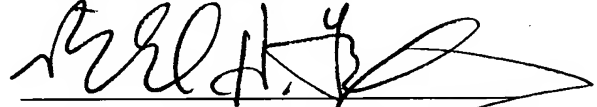
It is apparent that the signaling device according to Pederson cannot absolutely operate under condition of poor visibility, such as fog or snow.

Therefore, the choice of a laser generator instead of a conventional light source in combination with the choice of the suitable orientation and configuration thereof cannot be considered small "details", but very important improvements in the safety driving under conditions of poor visibility.

The examiner's prior art rejection should be withdrawn.

Respectfully submitted,

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